

### ABSTRACT OF THE DISCLOSURE

The controller of the present invention includes an optical navigation system which is responsive to movement, velocity of position of a rotatable platter. The optical navigation system is responsive to rotation of the rotatable platter and is further responsive to at least one degree of freedom of tilting of the rotatable platter. The rotatable platter typically includes a textured pattern so that the optical navigation system can acquire sequential surface images of the textured pattern.